



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,688	08/07/2002	Brian Bennie	201-1003	9309

28549 7590 02/17/2005

KEVIN G. MIERZWA
ARTZ & ARTZ, P.C.
28333 TELEGRAPH ROAD, SUITE 250
SOUTHFIELD, MI 48034

EXAMINER

NGUYEN, TAI T

ART UNIT PAPER NUMBER

2632

DATE MAILED: 02/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,688

Applicant(s)

BENNIE ET AL.

Examiner

Tai T. Nguyen

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 17 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: Applicant must provide serial numbers and filing dated of related applications. All references to attorney docket numbers must be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, lines 11-12, it is not clear whether applicant intends “the pressure transmitters are not in a fault condition” is intended to be an indication of the fault by the transmitters or a fault in the transmitters. It is assumed that applicant intended the composite warning including a signal of a faulty transmitter/sensor.

Regarding claim 4, lines 9-10, it is not clear whether applicant intends “the pressure sensors are not in a fault condition” is intended to be an indication of the fault by the sensors or a fault in the sensors. It is assumed that applicant intended the composite warning including a signal of a faulty transmitter/sensor.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juzswik et al. (US 6,612,165) in view of DeZorzi (US 6,667,687).

Regarding claim 1, Juzswik et al. disclose a similar tire pressure monitoring system (10) for a tire of an automotive vehicle (12) comprising:

a first pressure sensor (20, figure 1) coupled to a wheel (14);

a pressure transmitter having a transmitting antenna (34) for transmitting a pressure signal (figure 1; col. 3, lines 60-64); and

a controller (36) coupled to the pressure transmitter, the controller receiving the pressure signal, comparing the pressure signal to a pressure threshold to obtain a sensor status and qualifying the sensor status signal by generating a composite warning status to a first and a second indicators (48, 50) in response to the sensor status (figure 1; col. 3, line 65 through col. 6, line 27), wherein the composite warning status provides an in-range signal when the pressure statuses have not exceeded the pressure threshold (see abstract). Juzswik et al. disclose everything claimed except the composite warning system including a signal when the pressure transmitters/sensors are not in a fault condition. DeZorzi teaches a tire condition sensor system providing indication of a faulty sensor (col. 5, lines 50-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a faulty

transmitters/sensors indication with the system of Juzswik et al., as suggested by DeZorzi, for the purpose of ensuring accurate operation.

Regarding claims 2-3, Juzswik et al. disclose the controller qualified the sensor status signal by generating an alert signal to the first indicator (48) indicating a respective tire pressure value is outside predefined range (col. 5, lines 53-65) and also indicating to the vehicle operator the condition of low tire pressure condition (col. 4, lines 48-50).

Regarding claims 4-7, the claimed method steps would have been inherent in the product structure as stated in claims 1-3 above.

6. Claims 8-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juzswik et al. and DeZorzi as applied to claims 1-7 above, and further in view of Bezek et al. (US 6,278,363).

Regarding claim 8, as mentioned in claim 1 above, Juzswik et al. further disclose a receiving antenna (46) coupled to the controller (36) for receiving a plurality signals transmitted from the transmitting antenna (34, col. 4, lines 30-36). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to know that the transmitting antenna is transmitting a plurality signals to the controller for the purpose of ensuring the accuracy of detecting the tire pressure.

Juzswik et al., as modified, disclose everything claimed except composite warning including a flat pressure warning status. Bezek et al. disclose a similar system for monitoring air pressure of tires on a vehicle comprises a processor (26) for generating a flat pressure warning status signal to an indicator (28) in response to a sensed signal transmitted from a pressure sensor (12) to alert a vehicle operator (figure 1; col. 3, line 11 through col. 4, line 13). Therefore, it

would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the flat pressure warning status signal as taught by Bezek et al. into the system as disclosed by Juzswik et al., as modified, for the purpose of indicating to the vehicle operator all tire pressure conditions (high, low and flat).

Regarding claims 9-10 and 12, Juzswik et al. also disclose a pressure gauge indicator (50, figure 1). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to recognize that the warning status signal can be displayed by a predetermined number for the purpose of indicating the reading pressure of each monitored tire.

Regarding claim 11, Juzswik et al. disclose the controller qualified the sensor status signal by generating an alert signal to the first indicator (48) indicating a respective tire pressure value is outside predefined range (col. 5, lines 53-65).

Regarding claims 13-14, Juzswik et al. disclose the controller (36) generates an indication (48) in response to the warning status signal, wherein the indication comprises an audible signal or a visual signal (col.4, lines 37-64).

Regarding claim 15, as mentioned in claim 8 above, Juzswik et al. further disclose the steps generating a first high/low pressure warning status signals in response to the comparing the plurality of pressure signal (col. 4, line 48 through col. 5, lines 65). Juzswik et al. disclose the instant claimed invention except for: the step of generating a first flat pressure warning status signal in response to the pressure status signal. Bezek et al. disclose a similar system for monitoring air pressure of tires on a vehicle comprises a processor (26) for generating a flat pressure warning status signal to an indicator (28) in response to a sensed signal transmitted from a pressure sensor (12) to alert a vehicle operator (figure 1; col. 3, line 11 through col. 4, line 13).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the flat pressure warning status signal as taught by Bezek et al. into the system as disclosed by Juzswik et al. for the purpose of indicating to the vehicle operator all tire pressure conditions (high, low and flat).

Regarding claim 16, Juzswik et al. disclose the step of generating a low pressure warning status signal when the pressure status signal is below the low pressure threshold (col. 4, lines 48-50).

Regarding claim 17, refer to claim 15 above, Bezek et al. disclose the step of generating a first flat pressure warning status signal when the pressure status signal is below the flat pressure threshold (col. 4, lines 8-13).

Regarding claims 18-20, refer to claim 15 above, Juzswik, as modified, fail to disclose a step of when the pressure status signal is above a high pressure threshold, generating a second high pressure warning status signal. Bezek et al. teach a step of generating a high-pressure warning status signal in response to high- pressure status signal (col. 10, lines 7-20).

Response to Arguments

7. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tai T. Nguyen whose telephone number is (703) 308-0160. The examiner can normally be reached on Monday-Friday from 7:30am-5:00pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (703) 308-6730. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Tainguyen", with a large, sweeping initial stroke.

February 12, 2005
Tai T. Nguyen
Examiner
Art Unit 2632